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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/649,885

08/26/2003

Thomas Stack

QTI-10502/01

7827

7590

09/09/2004

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EXAMINER

PHILOGENE, HAISSA

ART UNIT

PAPER NUMBER

2828

DATE MAILED: 09/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/649,885

Applicant(s)

STACK, THOMAS

Examiner

Haissa Philogene

Art Unit

2828

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☒ Claim(s) 17 and 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities: In page 6, line 21, change "D2" to --T2--. In page 8, line 8, change "and" to --an--.

Appropriate correction is required.

Claim Objections

Claim 1 is objected to because of the following informalities: In line 3, change "the" before "electrical energy" to --an-. Appropriate correction is required.

Claims 13-16 are objected to under 37 CFR 1.75 as being a substantial duplicate of claims 5- 8. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claims 1-10 and 13-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 1, the phraseology "the energy does not conform to a predetermined condition" is not understood. The examiner can not tell from that language what the predetermined condition is and how the sensed energy is related to it. Applicant is required to clarify this matter.

Claims 2-10 and 13-16 are rejected by virtue of their dependencies on the independent claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Brooks, Patent No. 6,292,339.

Brooks discloses in Fig.2 a shut-down circuit (30) configured for use with an electronic ballast (10) coupled to a lamp (26) in a control path via secondary winding L3, comprising a device (40) for sensing an electrical energy associated with the control path; and a sensing circuit (40-46) for shutting down the ballast in the event that the sensed energy does not conform to a predetermined condition readable as an abnormal

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condition of the lamp or unstable arcing; said energy being current indicative of the lamp removal (see Col.4, lines 48-50) or voltage indicative of arcing or voltage fluctuations caused by unstable arcing (see Col.4, lines 48-56);

Claims 1-3, 5, 6, 11, 13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Stack, Patent No. 6,222,322.

Stack discloses in Fig.5 a shut-down circuit (202) configured for use with an electronic ballast (200) coupled to a lamp (FL1) in a control path via isolation transformer T5, comprising a device (R6) for sensing an electrical energy associated with the control path; and a sensing circuit (202) for shutting down the ballast in the event that the sensed energy does not conform to a predetermined condition readable as an abnormal condition of the lamp or unstable arcing; said energy being current indicative of the lamp removal or voltage indicative of arcing or voltage fluctuations caused by unstable arcing (see Col.8, lines 5-7); said device for sensing an electrical energy associated with the control path including an optical isolator (see Col.11, lines 38-46) and electronic componentry (C12, 204, Q3') to disable the sensing circuit during initial energization of the lamp.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brooks.

Brooks discloses the claimed invention substantially as explained above except for the device for sensing the electrical energy or voltage fluctuations in the control path being an isolation transformer instead of a sniffer winding. However, the examiner takes Official Notice of the use of the well-known isolation transformer in the electronic ballast system art for at least isolation purposes. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the well-known isolation transformer into the Brooks type system. This can be done by replacing the Brooks' sniffer winding with the well-known isolation transformer, because it would not only be able to perform sensing but also isolate the lamp circuit from the monitoring circuit, thereby improving the efficiency of the system.

Allowable Subject Matter

Claims 17 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 7-10, 15 and 16 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

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Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bay, Patent No. 4,382,212; Jayaraman et al., Patent No. 5,650,694.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Haissa Philogene whose telephone number is (571) 272-1827. The examiner can normally be reached on 6:30 A.M.-6:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MinSun Harvey can be reached on (571) 272-1835. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

hp

Haissa Philogene
Primary Examiner

A.U. 2826

